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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,193	05/12/2006	Shigeru Ichikawa	0943-0166PUS1	6727
2292 7590 12/20/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER GORDON, BRYAN P	
			ART UNIT 2834	PAPER NUMBER
			NOTIFICATION DATE 12/20/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/579,193

Applicant(s)

ICHIKAWA ET AL.

Examiner

Bryan P. Gordon

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Tomoki (JP 06006989).

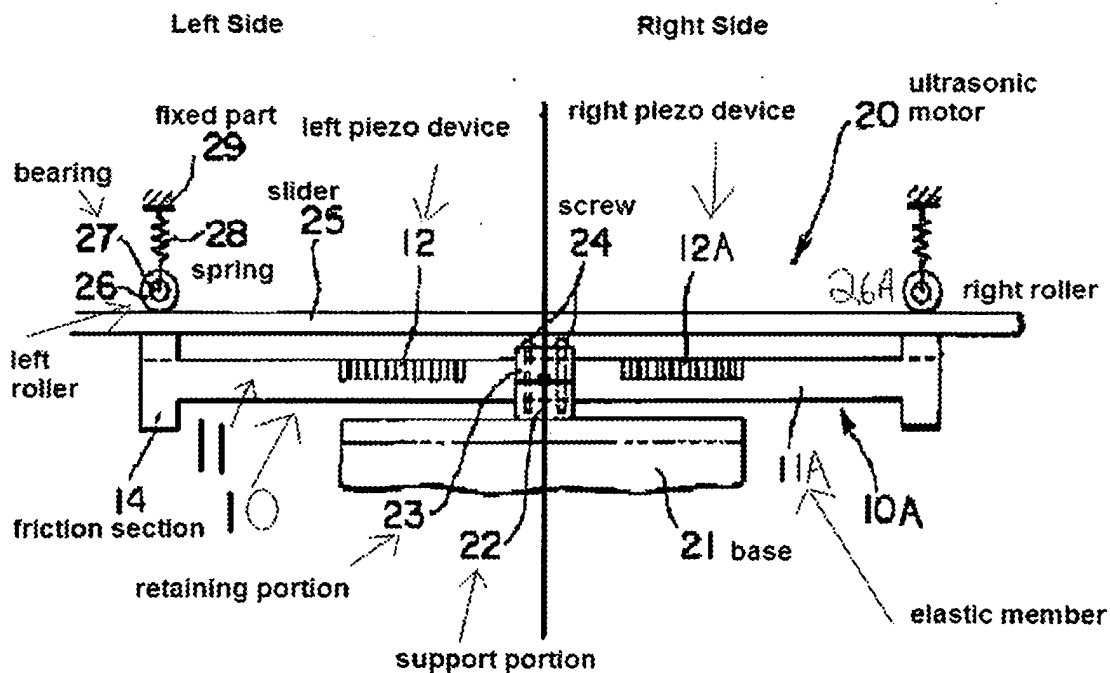


Figure 2

3. Considering claim 1, Tomoki (Figure 2) teaches a drive device (paragraph 0012) of an ultrasonic linear motor (10) in which a rail (25) and a base body (21) are driven

movably relative to one another by a driving part interposed between the rail and the base body, at least a pair of right (26A) and left rollers (26) making contact with side faces of the rail, at least a pair of right (10A) and left ultrasonic (10) vibrators for applying a turning force individually to each of the pair of right and left rollers, an urging member (14) that urges the ultrasonic vibrator and the rollers toward the side faces of the rail; wherein each of the pair of right and left ultrasonic vibrators is comprised of a piezoelectric device (12, 12A) and vibrating elastic member (11, 11A) integrally affixed to the piezoelectric device, and each of the pair of right and left rollers is adapted to be turned by vibration of the respective elastic member.

4. Considering claim 2, Tomoki (Figure 2) teaches the claimed invention as described above and the holding frame (23).

5. Considering claim 4, Tomoki (Figure 2) teaches the claimed invention as described above.

6. Considering claim 5, Tomoki teaches the claimed invention as described above in claim 1.

7. Considering claim 6, Tomoki teaches the claimed invention as described above in claim 2.

8. Considering claim 8, Tomoki teaches the claimed invention as described above in claim 2.

9. Considering claim 9, Tomoki (Figure 2) teaches wherein the base body is movably supported on an upper surface of the rail (25) by bearings (26) disposed on a bottom face of the base body (21).

***Claim Rejections - 35 USC § 103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomoki (JP 06006989), in view of Toda (US PN 5,130,599) and in view of Nonaka (US PN 5,267,796).

15. Considering claim 3, Tomoki in view of Toda teaches wherein the rail has an upper face (22) for bearing the load of the base body (21) and a bottom face (21) of the base body.

However, Tomoki in view of Toda does not teach the sloping sides surfaces from on the left and right side the rollers being mounted on the opposing faces making contact with the sloping side faces of the rail.

In the same field of endeavor, Nonaka (Figure 12) teaches the sloping sides surfaces from on the left and right side the rollers (60) being mounted on the opposing faces making contact with the sloping side faces of the rail (53) for the benefit of providing an alternative suitable configuration that makes sliding more facile.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include sloping sides surfaces from on the left and right side the rollers being mounted on the opposing faces making contact with the sloping side faces of the rail for the benefit stated above.

16. Considering claim 7, Tomoki in view of Toda and in view of Nonaka teaches the claimed invention as described above in claim 3.

### ***Response to Arguments***

17. Applicant's arguments filed 25 October 2007 have been fully considered but they are not persuasive. The applicant stated that the examiner did not clarify what they

believe to be the base body. The examiner has made that clear in the rejection above. The examiner has also provided a picture of the drawing outlying what the examiner used to reject the piezoelectric element and elastic body. As can be see by the Figure 2 the elastic member is affixed to the piezoelectric elements.

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US PN 5,416,375 published May 16, 1998 by Tomoki Funakubo.

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan P. Gordon whose telephone number is 571-272-5394. The examiner can normally be reached on Monday-Thursday 8:00-5:30, Friday 7:30-4:00.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

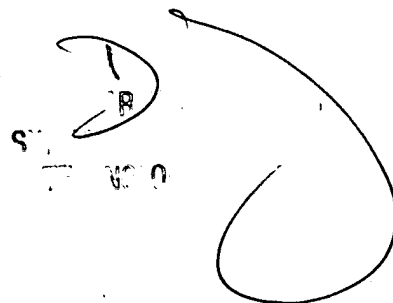
23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature, possibly "S. P. Gordon", is written above the date "12/12/2007". A large, loopy circular mark is drawn to the right of the signature and date.